

WHAT IS CLAIMED IS:

1. A method for treating hyperpigmentation, or other unwanted pigmentation, or other unwanted skin condition, comprising topically administering to the skin of a subject in need of treatment a composition comprising one or more siRNA oligomers specific for tyrosinase mRNA in an amount effective to prevent, ameliorate, reduce, and/or eliminate the hyperpigmentation, or other unwanted pigmentation, or other unwanted skin condition.

2. The method according to claim 1, wherein the composition is a topical composition.

3. The method according to claim 2, wherein said composition is applied for a period of time effective to prevent, ameliorate, reduce, and/or eliminate hyperpigmentation, or other unwanted pigmentation, or other unwanted skin condition.

4. The method according to claim 1, wherein the siRNA oligomer has the sequence:

5'-UAGGACCUGCCAGUGCUCUtt-3'
3'-ttAUCCUGGACGGUCACGAGA-5'.
5'-UAGGACCUGCCAGUGCUCUtt-3'
3'-ttAUCCUGGACGGUCACGAGA-5'
5'-UCCUGGAAACCAUGACAAtt-3'
3'-ttAGGACCUUUGGUACUGUUU-5'
5'-CACACCUGUCUUUGUCUUAtt-3'
3'-ttGUGUGGACAGAAACAGAAC-5'

5. The method according to claim 3, wherein the composition is applied at least once daily for at least one week.

6. The method according to claim 1, wherein the one or more siRNA is present in an amount from about 0.0001 wt% to about 10 wt% of the total weight of the composition.

7. The method according to claim 1, wherein the one or more siRNA is present in an amount from about 0.0005 wt% to about 5 wt% of the total weight of the composition.

8. The method according to claim 1, wherein the one or more siRNA is present in an amount from about 0.001 wt% to about 1 wt% of the total weight of the composition.

9. The method according to claim 1, wherein the composition comprises a cosmetically or dermatologically acceptable vehicle.

10. The method according to claim 1, wherein the composition further comprises a sunscreen.

11. The method according to claim 10, wherein the sunscreen is selected from the group consisting of avobenzene, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide and combinations thereof.

12. The method according to claim 11, wherein the cinnamic acid derivative is octylmethoxycinnamate.

13. The method according to claim 1, wherein the composition further includes an ingredient selected from the group consisting of an alpha hydroxy acid, a beta hydroxy acid, a keto acid, an oxa acid and an oxa diacid.

14. The method according to claim 1, wherein the composition is administered via a transdermal patch.

15. The method according to claim 1, wherein the composition is applied to the face, forehead, neck, arms, hands, legs, knees, feet, chest, back, groin, or buttocks.

16. A method of improving the aesthetic appearance of skin, comprising topically applying to the skin a composition comprising one or more siRNA oligomers specific for tyrosinase in an amount effective to reduce, inhibit, or ameliorate one or more unwanted skin conditions.

17. The method according to claim 16, wherein the improvement is selected from the group consisting of lightening skin tone, reducing the aged appearance of skin, decreasing hyperpigmented states such as age spots, freckles, and the like, improved skin discoloration, and combinations thereof.

18. The method according to claim 16, wherein the skin is sensitive skin.

19. The method according to claim 16, wherein the composition is applied topically at least once daily for at least one week.

20. The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.0001 wt% to about 10 wt% of the total weight of the composition.

21. The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.0005 wt% to about 5 wt% of the total weight of the composition.

22. The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.001 wt% to about 1 wt% of the total weight of the composition.

23. The method according to claim 16, wherein the composition comprises a cosmetically or dermatologically acceptable vehicle.

24. The method according to claim 16, wherein the composition is administered in a liposome delivery vehicle or a transdermal patch.

25. The method according to claim 24, wherein the composition in the liposome delivery vehicle is administered topically.

26. The method according to claim 16, wherein the composition is administered in a biodegradable microsphere.

27. The method according to claim 16, wherein the composition further comprises a sunscreen.

28. The method according to claim 27, wherein the sunscreen is selected from the group consisting of avobenzone, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide and combinations thereof.

29. The method according to claim 28, wherein the cinnamic acid derivative is octylmethoxycinnamate.

30. The method according to claim 16, wherein the composition further includes an ingredient selected from the group consisting of an alpha hydroxy acid, a beta hydroxy acid, a keto acid, an oxa acid and an oxa diacid.

31. A method of treating, preventing, reducing, ameliorating, and/or eliminating, hyperpigmentation, or other unwanted pigmentation, comprising: providing a composition comprising an siRNA oligomer specific for tyrosinase to an individual in need thereof, in an amount effective to block or reduce tyrosinase enzyme production in skin or hair, wherein said inhibition or reduction of tyrosine enzyme production concomitantly inhibits or reduces the synthesis of melanin, thereby treating, preventing, reducing, ameliorating, and/or eliminating hyperpigmentation, or other unwanted pigmentation in the skin or hair.

32. The method according to claim 31, wherein the siRNA oligomer has the sequence:

5'-UAGGACCUGCCAGUGCUCUtt-3'
3'-ttAUCCUGGACGGUCACGAGA-5'.
5'-UAGGACCUGCCAGUGCUCUtt-3'
3'-ttAUCCUGGACGGUCACGAGA-5'
5'-UCCUGGAAACCAUGACAAtt-3'
3'-ttAGGACCUUUGGUACUGUUU-5'
5'-CACACCUGUCUUUGUCUUAtt-3'
3'-ttGUGUGGACAGAAACAGAAC-5'

33. The method according to claim 32, wherein the composition is topically applied to the skin.

34. The method according to claim 32, wherein the composition is contained in a liposome delivery vehicle or a transdermal patch.

35. The method according to claim 32, wherein the composition further includes a sunscreen.

36. The method according to claim 35, wherein the sunscreen comprises one or more ingredients selected from the group consisting of avobenzone, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide, and mixtures thereof.

37. The method according to claim 32, wherein the siRNA oligomer is present in an amount of from about 0.0001 wt% to about 10 wt% of the total weight of the composition.

38. The method according to claim 32, wherein the siRNA oligomer is present in an amount of from about 0.0005 wt% to about 5 wt% of the total weight of the composition.

39. The method according to claim 32, wherein the siRNA oligomer is present in an amount of from about 0.001 wt% to about 1 wt% of the total weight of the composition.

40. A cosmetic composition comprising:
one or more siRNA oligomers in an amount effective to prevent, ameliorate, reduce and/or eliminate skin hyperpigmentation or other unwanted skin pigmentation, or other unwanted skin condition; and a topical cosmetically acceptable vehicle.

41. The composition according to claim 40, wherein the siRNA oligomer has the sequence:

5'-UAGGACCUGCCAGUGCUCUtt-3'
3'-ttAUCCUGGACGGUCACGAGA-5'.
5'-UAGGACCUGCCAGUGCUCUtt-3'
3'-ttAUCCUGGACGGUCACGAGA-5'
5'-UCCUGGAAACCAUGACAAAtt-3'
3'-ttAGGACCUUUGGUACUGUUU-5'
5'-CACACCUGUCUUUGUCUUAAtt-3'
3'-ttGUGUGGACAGAAACAGAAC-5'